

NOVEL POWER ON RESET CIRCUIT FOR A MICROCONTROLLERABSTRACT

In accordance with one embodiment of the present invention, a circuit

5 provides power stability functions for a microcontroller, during startup and normal operations performing power on reset functions and an array of power stability functions. The power on reset functions hold the microcontroller in a safe reset condition, reinforce the POR hold, and force its switch mode pump to drive up voltage provided to its common supply source. The power stability functions

10 constitute a power on reset function, a power supply health, e.g., power state condition monitoring function, a control function for dynamically controlling the common supply source, and auxiliary functions, which may be protective of a flash memory. The power on reset function operates at a fixed and/or programmably changeable voltage levels. In one embodiment, the POR circuit is interconnected with a

15 processor through a bus, enabling programmatic processor control of microcontroller power through interaction with the POR circuitry.